UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,877	11/30/2001	Ali Sazegari	P2395-514	2764

7590   05/23/2005

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EXAMINER
MAI, TAN V

ART UNIT	PAPER NUMBER
2193	

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		09/996,877	SAZEGARI ET AL.
		Examiner	**Art Unit**	
		Tan V. Mai	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11/3/04 and 3/8/05*.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date *3/8/05*.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

1.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

Claims 1-13 recite a method for performing a mathematical function. The claimed

invention comprises a plurality of mental steps whereby the claimed mental steps are

non-statutory subject matter. Specifically, the claimed method steps can be practiced

mentally in conjunction with pen and paper. Apparatus claim 14 does NOT recite a

specific machine.

However, in order for such a claimed computer-related process to be statutory,

the method claims must include either a step that results: (1) in a physical

transformation outside the computer, (2) in a limitation to a practical application, or (3)

performed specific machine/element(s). Accordingly, claims 1-14 are clearly directed to

a non-statutory process.

3.   Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wang et al (Applicants' admission Prior Art).

Wang et al disclose a **parallel-decomposition algorithm for performing**

convolution, e.g., see abstract (lines 1-5); section 1, lines 33-41; and section 4,

especially equation (10). It is noted that Wang et al do not show the detail steps /

hardware as claimed; however, a person having ordinary skill in the art could design the claimed invention according to Wang et al's teachings because the proposed **parallel-decomposition algorithm** technique discloses a detail for performing convolution as claimed.

4.   Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardner (Applicants' admission Prior Art).

Gardner discloses in section 2 and Fig. 3, a **parallel-decomposition algorithm** $[y = x^*h = y + y + y + y]$ by parallel processors (see section 6). It is noted that Gardner does not show the detail steps / hardware as claimed; however, a person having ordinary skill in the art could design the claimed invention according to Gardner's teachings because the proposed **parallel-decomposition algorithm** technique discloses a detail for performing convolution as claimed.

5.   Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torger et al (Applicants' admission Prior Art).

Torger et al disclose a **parallel-decomposition algorithm for performing convolution**, e.g., see section 2.2 and Fig. 5. It is noted that Torger et al do not show the detail steps / hardware as claimed; however, a person having ordinary skill in the art could design the claimed invention according to Torger et al's teachings because the proposed **parallel-decomposition algorithm** technique discloses a detail for performing convolution as claimed.

6.   Due to the new grounds of rejection cited above, that the office action is NON-FINAL.

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is:

Official   (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Tan V. Mai
Primary Examiner